

Application No. 10/822,642

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1.-19. (Cancelled).

20. (Currently Amended) A method for forming an optical fiber preform, the method comprising inserting a coated insert within a glass preform structure, ~~the coated insert comprising a powder coating, wherein the powder coating on the insert comprises a rare earth metal element.~~

21. (Cancelled).

22. (Previously Presented) The method of claim 39 wherein the flowing reactor comprises a radiation beam intersecting a reactant stream at a reaction zone at which the product stream is generated.

23. (Previously Presented) The method of claim 39 wherein the insert is rotated when forming the coating.

24. (Currently Amended) The method of claim 20 wherein the coating comprises particles [[have]] having an average primary particle diameter of no more than about 500 nm.

25. (Currently Amended) The method of claim 20 wherein the coating comprises particles [[have]] having an average primary particle diameter of no more than about 100 nm.

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26. (Previously Presented) The method of claim 20 wherein the coating is approximately uniformly distributed around the insert.
27. (Cancelled).
28. (Previously Presented) The method of claim 22 wherein the radiation beam is generated by a laser.
29. (Previously Presented) The method of claim 39 wherein the flowing reactor comprises a reaction chamber and wherein the insert is within the reaction chamber when the insert is placed in the product stream.
30. (Previously Presented) The method of claim 39 wherein the flowing reactor comprises a reaction chamber and wherein the insert is external to the reaction chamber when the insert is placed in the product stream.
31. (Currently Amended) A method for forming an optical fiber preform, the method comprising:
forming a powder coating on an insert in a flowing reactor by placing the insert in a product stream of the flowing reactor, wherein the reaction to form the product stream is driven by a light beam intersecting a reactant stream wherein the light beam is directed along an optical path between a reactant inlet nozzle and the insert; and
inserting the insert with the coating within a glass preform structure.
32. (Currently Amended) The method of claim 31 wherein the powder coating comprises particles having an average primary particle diameter less than about a micron.
33. (Currently Amended) The method of claim 31 wherein the powder coating comprises particles having an average primary particle diameter of no more than about 500 nm.

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34. (Currently Amended) The method of claim 31 wherein the powder coating comprises particles having an average primary particle diameter of no more than about 100 nm.
35. (Currently Amended) The method of claim 31 wherein the powder coating comprises a rare earth metal.
36. (Previously Presented) The method of claim 31 wherein the insert is rotated when forming the coating.
37. (Previously Presented) The method of claim 31 wherein the coating is approximately uniformly distributed around the insert.
38. (Previously Presented) The method of claim 31 wherein the light beam is generated by a laser.
39. (Currently Amended) The method of claim 20 further comprising forming the powder coating on the insert in a flowing reactor by placing the insert in a product stream of the flowing reactor.
40. (Previously Presented) The method of claim 20 wherein the relative density is from about 0.02 to about 0.55.
41. (Previously Presented) The method of claim 20 wherein the relative density is from about 0.05 to about 0.40.
42. (Previously Presented) The method of claim 31 wherein the relative density is from about 0.02 to about 0.55.

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43. (Previously Presented) The method of claim 31 wherein the relative density is from about 0.05 to about 0.40.